CMHC
Canada Mortgage
and Housing Corporation

SCHL
Société canadienne
d'hypothèques et de logement

CMHC2 MARKET ROLLOUT STRATEGY

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INFORMATION SYSTEMS GROUP
MAY 1986
D02CMH02

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PREFACE

This report, the CMHC2 Market Rollout Strategy, is a document from Phase 2 of the CMHC2 Market Evaluation project. It takes findings from Phase 1 Product Assessment, Competitive Analysis, and Target Market information to develop a strategy designed to bring the CMHC2 product to market.

The resultant strategy document provides a basis for CMHC management decision making with respect to CMHC2 and its potential. It will also allow companies interested in selling a product like CMHC2 to review their potential within an organized framework specific to the CMHC2 product.

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1.0 SUMMARY

A Market Rollout Strategy and subsequent business case for that strategy was developed to estimate the relative level of success possible for the CMHC2 product. It is presented from two points of view: CMHC and the Master Distributor.

In the early stages of the rollout strategy creation, it appeared that it would be possible to generate various standalone approaches to address specific target markets. However, although differentiating the product to individual targets seemed desirable, the reward from individual market segments did not appear to be large enough to make each single initiative approach profitable. Also, due to the present nature of the product (not yet completely developed) it is difficult, although not impossible, to sub-license distributors in certain target market areas without first creating a complete stand-alone product.

The proposed strategy offers a four phase approach which should allow for maximum product penetration in various target areas. It is intended to be engineered by one "Master Distributor" type of company.

The four phases of the strategy are:

Phase 1: Complete the CMHC2 standalone product

Phase 2: Architect/Engineer Sales

Phase 3: Lumber and Building Materials Distributor Approach

Phase 4: Heating/Cooling Equipment Manufacturer/Distributor Strategy.

Each phase has its own associated target market and related product offering.

The phases are expected to overlap to some degree and Phase 1, the development phase, could take 8-12 months of elapsed time based on the existing estimates of manpower and skill to be used on the project. Phase 2, The initial product launch, can be started a month later and the Rollout to a sub-distributor network could then progress with subsequent groups of sub-distributors every 3-4 months. Phase 3 and Phase 4 can be initiated any time after the successful training of sub-distributors in Phase 2, at the discretion of the Master Distributor (including availability of appropriate staff and funding).

Over three years of sales it is projected that each phase (2 through 4) would sell product as shown in Appendix B: Product Sales Projections, with a bottom line gross contribution of anywhere from a Worst Case loss of $280,000 to a Best Case contribution of $1,111,500. The Probable Case represents a gross contribution of $332,900. The distribution network established by the Master distributor through this approach would then be ready for follow-on product or services sales.

2.0 THE CMHC2 PRODUCT ROLLOUT PROGRAM

The CMHC2 Market Rollout program, provides CMHC with information to determine all activities necessary to bring CMHC2 to market. It also presents a strategy for potential exploitation of the CMHC2 concept, which maximizes market coverage, limits the effectiveness of potential competition and reduces the subsequent associated risk.

The Main Rollout program is designed as a long-term business approach around a Master Distributor concept. It employs a sub-distribution network and the execution of four rollout phases. This approach is intended for a company already involved with one or more of the selected target markets. Examples of prospective Distributor and sub-distributor groups can be seen in Appendix G.

The strategy provides cost estimates associated with expense of the Rollout, as well as sales projections to allow an overall financial viability check of the program.

2.1 THE TARGET MARKET

The CMHC2 product can be sold to three distinct market segments. It can be sold as a stand alone product or it can be integrated with other software packages and service offerings.

The entire rollout strategy can be completed in four phases as follows:

PHASE	TARGET	PRODUCT
1	N/A	develop standalone software package
2	Architects Engineers Large Builders Franchises	standalone package and/or integrated CAD system
3	Lumber and Building Materials Supply Distributors	integrated with Estimating software package
4	Heating/Cooling Equipment Manufacturers Distributors Retailers	standalone, customized as a sales demonstration

These market targets were selected for their potential in generating sales and also for providing necessary market exposure. In addition, the following organizations are included which influence the primary market areas:

- Trade Associations
- Government Departments

- Agencies
- Educational Institutions

These are referred to as "Other Areas of Influence". They do not reflect major possible market areas for the CMHC2 product, but acceptance of the product in these areas would assist future CMHC2 sales in the general market place.

In the case of the trade associations, both the Master Distributor and sub-distributors will use them as a conduit to sell the CMHC2 product to the membership. The associations may also require the use of CMHC2 for their internal training programs.

2.2 ASSUMPTIONS

The rollout program was developed based on a series of assumptions. Those assumptions are documented for completeness in presentation.

1. The marketplace is North American for the first three to five years. Potential in International markets will be predicated on some domestic success.

2. The strategy proposed is for a three year period.

3. No one company can generate a large profit by selling software only to a target market unless large product sales volumes are achieved, at a good price, and with reasonable margins.

4. The CMHC support and influence must be retained and incorporated in the product documentation and promoted as a key credibility factor.

5. One company will be contracted through a technology transfer program and will serve as a Master Distributor.

6. This Master Distributor will co-ordinate a North American sales support program and sell the product directly, and indirectly through sub-distributors.

7. Sub-distributors will be key organizations within a target market segment. They will be influential, co-operative and innovative in their approach to business.

8. An advertising campaign to influence trade associations and to sell directly to the members will be undertaken by the Master Distributor using a Direct Mail program anticipated to be funded through part of the overall operating cost estimate.

9. Government Department programs, Housing programs, research agencies and educational institutions will be approached as a background influence effort; this will influence the target

markets in the long run to use innovative concepts in their business. A special strategy will be created for these organizations individually.

10. Although energy efficiency is not a predominant theme in the market place, energy efficiency is still going to play a role in quality of housing and cost-effective housing.

11. Growth in the renovation market is expected to continue to increase and will create new market potential for a product like CMHC2, if the product is positioned properly.

12. Demand in the market place can be generated to use CMHC2 to differentiate a target company's service offering. CMHC2 can thus become part of that company's product offering.

13. CMHC2 can be integrated or linked to existing Computer Aided Design (CAD) and Estimating software packages with minimal extra technical effort through use of existing interface software.

14. The use of the accronym CMHC2 will be changed to convey a selected product image and enjoy a wider market appeal, both in Canada and in the United States.

15. All product support revenues will be passed through to the Master Distributor. No royalty payments will be made on the support fees to the sub-distributor.

16. A phased approach will be taken in the Market Rollout; market coverage will be managed on a regional basis. It would be wise to initially expand market coverage to Canada's four larger provinces (Ontario, Quebec, Alberta, and British Columbia) and the North Eastern United States. Once this territory is profitable, further expansion could be managed. Care should be taken to isolate the states and provinces which promote energy efficiency standards in housing, and include them in an initial push. Canadian use of CMHC2 as an acceptable alternative to HOT2000 is also a consideration in the early stages of the Rollout Program.

2.3 CURRENT SITUATION

This section briefly reviews the market for CMHC2 from both internal and external perspectives.

Internal

At present there is no Master Distributor in place. The Master Distributor or alternate product development group will develop the CMHC2 product according to the existing product strategy. The Master Distributor would then create the infrastructure and subdistributor network to provide adequate coverage in the North American market.

The Master Distributor will promote the CMHC2 product to the target market through a National advertising campaign designed to generate leads. These leads will be handled by the Master Distributor or passed on to regional sub-distributors.

The Master Distributor will handle all "Influence Target Prospects" on behalf of the entire program. This will ensure a consistent coverage. Due to the wide geographic spread of potential clients, the Master Distributor and Sub-distributors will use direct marketing techniques (direct mail) and blanket advertising within a target segment, usually through a related association or parent business.

The Master Distributor will identify, sign and train all sub-distributors in all aspects of sales and sales management related to the CMHC2 product. This will be necessary in advance of their selling the product.

All sales support activities related to each Sub-distributor will be handled by the Master Distributor.

The Sub-distributor company is intended to operate within the program in a completely self sufficient manner. The Sub-distributor will provide all sales and client related information back to the Master Distributor on a monthly basis for tracking purposes.

All on-going client support activities of a product technical nature and associated revenues will be passed through to the Master Distributor.

A Product Control Panel will be put in place by the Master Distributor which will have relevant personnel actively involved from the Sub-distributor and client levels. Actively involved is interpreted as providing information to the Product Control Panel to assist in determining future product directions within a target area.

External

External factors relevant to the market rollout strategy consist of Competitors, Regulations, and Economic conditions in a target market.

By selling an integrated CMHC2 through a complementary software group, the CMHC2 strategy can avail itself of a relatively non-competitive market through:

- Existing installed base add-on sales
- New clients sold by complementary company
- User group involvement (without the cost to initiate)

Any regulations related to energy compliance of equipment or energy efficiency of housing will serve to assist the demand for software to demonstrate these considerations.

Economic conditions within each target area are generally growth oriented over the next three to five years, with the possible exception of the Heating and Cooling equipment distribution channel. The use of software tools to assist business has plenty of room for growth, and end user businesses will be looking for ways of differentiating themselves from their competition. The additional effect of a surge in renovation demand and the ability to be in the right place through this timeframe should provide for a successful program.

2.4 THE ROLLOUT STRATEGY DETAIL

The strategy discussion includes a brief overview of each strategy phase and for phases 2 through 4, provides information related to: product to be sold, target audience, channel of distribution, and any related information vis a vis pricing (unique to that strategy) and other business considerations.

a) PHASE 1: COMPLETE CMHC2 STAND-ALONE PRODUCT:

This phase involves the completion of the CMHC2 product through Design, Development and Quality control. It includes the creation of all support materials, initial product group organization and negotiation with organizations to sell CMHC2 in the rollout strategy. The product created will be a complete stand alone product. It is assumed that this product can then be integrated with other products to form a complementary product offering. The type of product to integrate with depends on the strategy phase. Sales materials and other product information should be tailored to each target market.

b) PHASE 2: ARCHITECT/ENGINEER SALES:

This phase involves the selling of CMHC2 as a standalone software package and/or as an integrated software package (with a Computer Aided Design system) to architects, engineers, large builders, and franchise operations. These companies all work in the housing market and have a need for assessing cost-effectiveness and energy efficiency of new house design or renovation design.

Business Considerations:

The product offering is designed to allow for the building or renovation of cheaper, more energy efficient homes and utilize new technology to improve the design process and provide some proof of the efficiencies designed into the subsequent product (the house).

Architects and Large Builders can emphasize the fact that they use CMHC2 in providing service to their clients to differentiate themselves from their competition.

If CMHC2 is integrated into a CAD package, the coverage of that new software offering allows for more comprehensive use of that product in the house design process. Micro CAD packages retail from $600 to $2,500.

Franchise operations in the house building and renovation markets allow for sale to a concentrated, easily identifiable target group. If the Franchise operator is sold at the national level, the existing franchisees may be required to use CMHC2 as a condition of the franchise.

c) PHASE 3: THE LUMBER AND BUILDING MATERIALS DISTRIBUTOR/RETAILER APPROACH

This approach involves selling CMHC2 as an integrated component of an Estimating software package. The resulting product allows a Lumber and Building Materials supplier (LBM) to provide the facility to estimate materials needed to build or renovate a house for a client, and then use CMHC2 to show the cost-effectiveness and energy efficiency of that design. Furthermore,

- Some LBM's presently use estimating software as a marketing tool to differentiate themselves from their competition and provide a wider service offering;
- Growth trends relate to an increase in the use of this type of system with an associated increased need to find something new;
- Renovation trends are also increasing which benefit LBM's; and
- LBM's are moving to integrate building trades services and manufactured building products into their business offering; it is anticipated that they will move to include house design services as part of that offering also.

d) PHASE 4: HEATING/COOLING EQUIPMENT, MANUFACTURER, DISTRIBUTOR PHASE

This phase of the Rollout Strategy is an attempt to maximize the use of CMHC2 capabilities as a sales tool to assist in the promotion of a company product such as an air conditioner or a furnace.

The CMHC2 product would be customized to simply perform energy and financial analysis using a standard house database. The heating or cooling components' would be customized to show the effect of a Brand X component versus the Other Competitor Brand. The resulting software offering would be sold to larger distribution companies who would contract for multiple copies of hardware and software.

The training services to teach the organization how to use the product to promote their wares would also be a component of the sale. The potential to sell customized sales literature in support is also possible. A good standalone automatic demonstration could further be created for use in department stores, other sales outlets, and trade shows.

- This strategy is breaking relatively new ground in a highly competitive, low margin business area.
- A major corporation sponsor of a program to all their distributors is the ideal approach here.
- There are a relatively low number of companies involved with this strategy.
- This target is not yet considered innovative with respect to the use of computer assistance. Education is necessary.
- The intent is to promote use of CMHC2 as a sales tool to assist in differentiating a product and increasing its associated sales.

3.0 MARKET ANALYSIS

The rollout strategy is presented in four distinct sections: market schedule, sales projection, financial analysis, and factors influencing product success.

3.1 MARKET SCHEDULE

The schedule for all the product phases are defined in serial fashion.

Phase Rollout Timing

ELAPSED TIME IN MONTHS	EVENT
0	Contract signing with the Master Distributor
+8	Phase 1: 6-8 months after Master Distributor contract signing is the estimated length of a development project. Estimate can change depending on the level of manpower and skill used on the project.
+9	Phase 2: Given a 2 month overlap with Phase 1, a product launch will be almost 9 months from the start of the project.
+12	Phase 2: Initial wave of distributors signed, trained, and up and running effectively.
Dependant	Phase 3: Can start, depending on availability of staff, funds and the success of Phase 2. This does not include any other impact such as a decision to expand Phase 2 distributors.
Dependant	Phase 4: Can start depending on availability of staff, funds and the success of Phase 2.

3.2 PRODUCT GROUP ORGANIZATION

The product group, which is intended to drive the entire process, will consist of a manager and two support product persons engaged in development and sales. They will be further supported by a part-time administration person which will bring the group number to four persons. This is a minimum group contingent. This group will provide a national sales support program, handle product development, and any product support related activities.

For purposes of this Strategy review, the Product Group will operate on an annual budget as shown in Appendix D along with a salary breakdown for the group. An estimate of the operating costs over the three years of sales is $260,000, $281,000 and $303,000, respectively.

The first year's budget is covered in the start-up cost estimate.

3.3 START-UP COSTS

The start-up costs are expected to cover the full product creation including design, development and quality control as well as all packaging and promotion materials.

It should be noted that it is advisable to sub-contract key specialist work related to Documentation, Product Packaging, and the Design and Development of Training and Demonstration kits, to industry expert firms. Product Production would also be handled by firms who specialize in producing shrink-wrap software packages.

Overall start-up costs are presently estimated at $440,000. Detail information is provided in Appendix E: Start-up Cost Breakdown. The product group will start with approximately 800 Product, Training and Demonstration kits as well as a supply of Sales Materials and brochures.

3.4 SALES PROJECTIONS

Based on an extensive analysis (documented in a working paper called Target Market Summary), the total projected sales for CMHC2 over a three year sales time span are: Worst Case: 2110 products, Best Case: 5050 and a Probable Case: 3390. Note that breakdown by sales phase can be seen in Appendix B. The breakdown of product sales potential by year is also shown in Appendix B.

3.5 PRODUCT PRICING

The sales projections for each phase are used as the basis for subsequent financial analysis. In order to determine revenue estimates related to the sales, we must determine a Product Pricing structure.

This Rollout Strategy uses a basic product price structure, dependent on the phase, which is effectively mid-range with respect to similar competitors. The pricing structure is not considered high enough to cause prospective clients concern at purchase time. The product base price for Phases 2 and 3 is $600 with a nominal fee of $35.00 for a Demonstration kit and $125.00 for a Training kit.

Phase 4 is $400 for a scaled down, packaged version of the same product which does not have individual training kits or demonstration kits. Given the custom sales approach, a customized sales program, including corporate-wide training and specific sales literature is more appropriate. It is assumed that these would provide contribution revenues of $3,000 and $2,000 respectively.

Discounting is not considered to be part of this strategy, although business needs may require the Master Distributor to consider it as an option during early Market Penetration.

A Product Pricing Schedule is shown in Appendix F.

3.6 FINANCIAL ANALYSIS

A Representative Summary Pro-Forma Financial St tement is shown in Appendix C which shows Product Revenues (based on Sales Projections by price), less the Cost of Sales, (consisting of start-up costs, royalty payments to CMHC, margin payments to the sub-distributors) which yields the following Gross Revenues; Best Case: $1,111,500; Worst Case: ($280,000) and a Probable Case: $332,900.

It is fairly evident from figures in Appendix C that the Best Case scenario is the only truly appealing one with the Probable Case being marginal. The major controlling influences on this scenario are in order:

- Initial Development Costs
- On-going Support Costs
- Price of Product
- Sales Margin Payment to Sub-distributor
- Sales Volume for Product
- Initial Target Market Estimate from Market Size

If the sub-distributors royalty was eliminated from the program (along with the sub-distributor), then the sales volume would be tougher to attain. If those volumes were attained, however, the Probable Case and Best Case scenarios would then be acceptable. The Worst Case scenario would still predict a loss over four years of operations.

4.0 ISSUES

Issues related to many aspects of the Market Rollout Strategy have an effect on the potential for success. Some of these issues are related in the following sections.

4.1 CORPORATE MANDATE

At the outset, it should be recognized that significant resources will be required to complete CMHC2. This will include product development in addition to organizing a marketing program and supporting product group infrastructure.

As a Crown Corporation, CMHC is dedicated to the promotion of social programs that assist in providing affordable housing to all Canadians. The mandate does not include that of product development and subsequent marketing. However, this venture can be viewed as one whereby the Corporation is indeed promoting affordable housing by supporting energy efficient house design - hence its active participation in this venture is justified.

Issues exist which relate to the level of CMHC involvement and funding, including:

- CMHC role in the program.
- Partial funding through PILP.
- Technology transfer management.
- Canadian content.
- Royalties due to the crown.

In effect, the fundamental question is whether this particular product and market development is congruent with corporate goals and objectives.

4.2 ORGANIZATIONAL

At present, the Corporation does not have an organizational group to develop and market CMHC2. The Corporation can develop that unit internally or preferably it can contract out the product development and assign all marketing to a Master Distributor. It is possible, although less appealing, to contract out the development separate from the marketing.

In either case, the unit selected to complete the development, produce the product, market, sell and support CMHC2 (either directly or indirectly) must have the following capabilities:

- Direct experience in the chosen target market(s) through consulting services or product sales.

- Sales management experience in the software products or related business (direct or distribution channel management).

- The ability to provide:

  - Product management
  - Marketing support
  - Direct sales or sales support
  - Product research
  - Product development
  - Product quality control
  - Co-ordination of product production
  - On-going product support

  including the necessary administrative support capable of handling the demands placed on an active product endeavor.

- Interest in long term market potential of CMHC2 as demonstrated by:

  - Creation and management of a Product Control Group made up of key product management and industry participants to assist in defining the product and its focus.

  - Being in a position to provide follow-up product strategies and capitalize on the distribution network created.

  - Potentially create a User Group organization or actively use special interest groups in trade associations.

In summary, developing CMHC2 will require significant resources that will in turn have a strong organizational impact. If the Corporation chooses to assign that responsibility (e.g. to the private sector), significant effort will still be required to identify appropriate companies, complete all subsequent negotiation, and set up a monitoring scheme.

4.3 PRODUCT/MARKET

The marketing success of any product is predicated on having a solid product at the outset. Product and market issues are intertwined and consequently are presented as an entity. In summary, the following functions must be covered.

- Product group to manage CMHC2 must be organized;

- Design of the product must be completed, product development including programming, documentation, etc. must be finished;

- A quality control program is required which would include product verification testing:

- A product packaging scheme should be developed; promotional material, brochures, demonstration kits, etc.;

- A comprehensive marketing program should be developed;

- Product sales support should be provided, for client use;

- o Pricing and Operating costs should be adjusted to reflect the specifics of a Master Distributor organization;

- o On-going market analysis should be adopted by the Master Distributor.

4.4 LEGAL

As previously mentioned, significant resources will be required to develop and to market CMHC2. That investment should be protected through a formal protection scheme including a license agreement for using the product.

Software protection can be accomplished through four basic schemes.

First, a patent grants a developer/investor the ability to prohibit others from using a patented program without paying a royalty. There is presently no definitive reading as to the effectiveness of a patent on a computer program. The patent process is costly and involved. At present it is not the preferred method of protection for a software product.

Second, the preferred method of protecting a software investment is copyright. This method gives the developer a right to prevent someone from copying his program, provided it has been published and is sold with a copyright notice. The copyright procedure is relatively inexpensive and straightforward. One drawback is the difficulty of extending protection from the original source code to modified versions of the product. This necessitates new copyright applications for subsequent releases of a product.

Third, another method available to protect a product author's right is referred to as a trade secret. An agreement is signed with customers (license agreement) and with employees (employment agreement) and contains a precise definition of trade secrecy and indicates the confidential and proprietary nature of the product.

Fourth, beyond these legal forms of protection of software there is the physical protection afforded by technical copy protection schemes which can be incorporated into the product. Physical copy protection allows a client to use the software product on only one system at a time.

Regardless of which form of protection is used, it is wise to consider the following:

- o Require employees, sub-distributors and demo clients to sign trade secrecy agreements;

- o Prohibit product use or distribution without the recipients' signing a trade secrecy agreement;

- o Ensure that physical steps are taken to protect the code at company sites (client, distributor and product group);

- Place copyright notices as required on the first screen, in computer source, documentation, and other places deemed appropriate; and

- File copyright applications as required.

Further legal control of the distribution and sale of a product necessitates the use of contract agreements and software licence agreements.

The main sections of a contract agreement or license for software include:

- Description of the product, including programs, documentation and other materials

- Form of program distribution

- Maintenance commitments

- Enhancements versus new releases

- Services to be provided

- License grant, including term and conditions of use

- Payment

- Tax payment as applicable

- Delivery and installation responsibilities

- Warrants of ownership and proprietary rights

- Limitations of liability

Legal counsel can establish a standard working contract in card form that can be packaged on the outside of a shrink wrapped product container.

Sales may be handled by a Master Distributor who will manage regional distribution outlets which in turn will sell direct to a target client. In this case, distribution agreements must be created and signed which provide both parties with some protection and service, and which clearly state a time frame, sales quota and performance arrangement. These agreements would be oriented to a specific target market, be regional in nature and would definitely be non-exclusive in market coverage.

5.0 SUCCESS/RISK FACTORS

The scenario generated is contingent on several factors.

- The CMHC2 product concept is good and should be competitive in the industry but the product must get to the market soon. Delays will remove market potential. Product development time frames must not increase, nor should presently estimated costs to complete.

- CMHC must find a candidate willing to be the Master Distributor. The Master Distributor must be highly capable in product development and marketing, and already selling product or services to some of the targets involved. Phase 2, 3 and 4, will be a tough challenge for one Master Distributor to manage.

- Sub-distributors must generate the sales volumes as noted in this strategy, or even exceed them.

- Sale of CMHC2 (an innovative product) must be streamlined i.e. the sales cycle should be condensed as much as possible.

- The estimate of Market size and Target Market sales projections must be achieved or exceeded. To aid this, the market trends are favourable through the next 3-5 years.

  The demand for a product like CMHC2 is presently perceived to be greater than is evidenced by market sales of competitive products. The new demand relates to addressing client business needs using a composite product (with CMHC2 built in) to satisfy a business requirement and provide a benefit to that client company. This approach in different industries will widen the use and appeal of a product like CMHC2.

- The support of complementary CAD and Estimating software product sales organizations, are vital for successful implementation.

APPENDIX A

GOVERNMENT PROGRAMS AVAILABLE

GOVERNMENT PROGRAMS AVAILABLE

Grants to offset development costs are:

- o PILP - Program for Industry/Laboratory Projects

  Normally the company contributes to the funding of a project. The Crown owns all intellectual property and licences. The company owns all new intellectual property developed during the project.

- o PEMD - Program for Export Market Development

  The government makes repayable contributions towards a company's cost in developing export business.

- o PPP - Promotional Projects Program

  The government provides a complete exhibition service, the cost of which is shared with the participants. This is aimed at trade fairs, missions, and official visitors to Canada.

- o IRDP - Industrial and Regional Development Program

  The Department of Regional Industrial Expansion provides this program to promote industrial development through private sector initiatives with emphasis on projects, industries and technologies with the greatest potential for economic return, sustained growth, and international competitiveness.

- o Other provincial grants and subsidies may also be available depending on the location of the Master distributor chosen by CMHC.

APPENDIX B

PRODUCT SALES PROJECTIONS

1: PRODUCT SALES PROJECTION BY PHASE

		CASE		
	TARGET ESTIMATE	BEST	PROBABLE	WORST
Phase 2	Architect/Engineer Target = 7000 solid prospects	3250	2250	1450
Phase 3	LBM's Target = 4200 solid prospects	1650	1050	600
Phase 4	Heating/Cooling Distributor Target = 2000 prospects	150	90	60
Total:		5050	3390	2110

The columns indicate both the percentage of the target base that can be sold, with the associated number of prospective clients below it.

Figure B distributes the sales over that period according to target market.

2: PRODUCT SALES by ROLLOUT PHASE YEAR
B/P/W; B = Best Case; P = Probable Case and W = Worst Case.

	YR 1 B/P/W	YR 2 B/P/W	YR 3 B/P/W	YR 4 B/P/W
Phase 2 Architect/Eng	250/150/100	1000/ 700/450	1000/ 700/450	1000/ 700/450
Phase 3 LBM's	N/A	550/ 350/200	550/ 350/ 200	550/ 350/ 200
Phase 4 Heating/Cooling Distributor	N/A	50/ 30 / 20	50/ 30/ 20	50/ 30/ 20
Total per year:	250/150/100	1600/1080/670	1600/1080/670	1600/1080/670

Total product sales over four years; Best case: 5050; Probable: 3390; and Worst: 2110.

Note: Sales will not be uniformly distributed over four years.

APPENDIX C

REPRESENTATIVE SUMMARY PRO-FORMA STATEMENT

REPRESENTATIVE SUMMARY PRO-FORMA STATEMENT

Sales	5050	3390	2110
	CASE		
	BEST ('000s)	PROBABLE ('000s)	WORST ('000s)
Revenue			
Software	$3,240	$2,160	$1,350
Total revenue	$3,240	$2,160	$1,350
Cost of Sales			
Cost of Product	$282.5	$187.5	$117.5
CMHC Royalty	$162	$108	$67.5
Sales Margin Payments to Sub-distributor	$400	$247.6	$161
Total Cost of Sale	$844.5	$543.1	$346
Gross Margin	$2,395.5	$1,616.9	$1,004
Operating Expenses	$1,284	$1,284	$1,284
Gross Contribution	$1,111.5	$ 332.9	($280)

Note:

- Product support revenues are not factored in as the potential for on-going support is limited.

- CMHC royalty payments are considered 5% for this analysis. Actual royalty payments will be estabished based on CMHC involvement and marketplace. CMHC may require a higher base royalty for International Sales of CMHC2.

- Sales margin payments to subdistributors of 20% of revenues generated, are phased in over the three years. Revenues are estimated to split as follows:

Phase 2:	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Master Distributor	100%	60%	50%	40%
Sub-Distributor	N/A	40%	50%	60%

Phase 3:				
Master Distributor	N/A	40%	30%	30%
Sub-Distributor	N/A	60%	70%	70%

The sub-distributors (supplier of estimating package) have an installed base and are in the best position to make sales to it.

Phase 4:
This phase is intended to be carried out by the Master Distributor with no sub-distributors.

- The Cost of Product is presently estimated at $50 per unit for Phase 2 and 3. Phase 4 cost of sale is $250 per unit sale. This represents the cost of 5 packages, presently considered a nominal sale.

APPENDIX D

PRODUCT GROUP OPERATING BUDGET

PRODUCT GROUP OPERATING BUDGET

This case sample has been devised as representative of the on-going annual expenses related to operating a small product group (four persons; three product group people with one part-time administrative support person) which will manage a distribution channel with a modest national sales support program.

	Year 1,	Year 2	Year 3
Salaries	$90,000		
Travel and Living	35,000		
Corporate Communications	20,000		
Computer Costs	12,000		
Facilities	33,000		
Administration	15,000		
Other	55,000		
Total Expenses	$260,000	$280,800	$303,264

In the strategy disucssions the operating expenses will take effect after the development phase is complete. The initial development expense is expected to cover the first eight to twelve months of effort. For subsequent years, the operating expense increases 8%. The total operating expense over three years in sales, and including the first year development costs, is approximately $1,284,000.

The three person team consists of:

- A group leader who acts as a manager, performs market reviews and sales support activities.
- A technical Sales Support person who assists in sales related work.
- A product support person who provides the initial product support and intially can also assist with sales support work. Minor development improvements can be handled by this person.

The breakdown for salaries is $35,000 group leader; $30,000 technical sales support and $25,000 for the product support person.

All expenses would be further defined in detail by the Master Distributor for CMHC2 based on their actual operating costs and intention to staff.

APPENDIX E

START-UP COST BREAKDOWN

START-UP COST BREAKDOWN

Estimated costs related to the following categories are considered to encompass a realistic initial start up cost estimate.

Product Design	$ 15,000
Product Development	$ 145,000
Product Integration	$ 15,000
Database Creation (Canada and USA)	$ 75,000
Documentation	$ 25,000
Quality Control (inc. Verification Test.)	$ 55,000
Training Kit	$ 10,000
Demonstration Kit	$ 15,000
Sales Materials	$ 25,000
Product Packaging	$ 20,000
Product Production	$ 40,000
TOTAL:	$ 440,000

The production costs are expected to produce approximately 800 products and Demonstration Kits for initial sale.

An exact method for product verification has not been decided but it can vary from the simple to the complex. The associated cost will also vary. The Product Distributor will choose the exact method in keeping with the requirement in each Target Market. The start-up cost estimate allows for $30,000 extra within the Quality Control category to perform verification tests. This will likely minimally involve running test cases and showing results which are more accurate (based on real test results) than other competitive products.

The Product Integration category includes all activities related to Technical Design, Development, Testing and Packaging of a Pre-processor like interface to existing CAD and Estimating packages. Agreements will be in place for complementary package marketing with these specialist companies.

APPENDIX F

PRODUCT PRICING SCHEDULE

PRODUCT PRICING SCHEDULE

	Phase 2 & 3	Phase 4
Product Price	$600	$400
Demonstration Kit	$ 35	N/A
Training Kit	$125	N/A
Services:		
Training Program	N/A	$3,000
Custom Sales Literature	N/A	$2,000

The revenue related to the demonstration kit is anticipated to be minimal and hence is not included in the financial analysis.

APPENDIX G

DISTRIBUTOR CANDIDATES

DISTRIBUTOR CANDIDATES

The following companies are potential candidates for the role of distributor of the CMHC2 product (either Master or Sub).

- Data Kinetics
  97 Norman Street
  Ottawa, Ontario
  K1S 3K5

- Morgan Systems Corporation
  1654 Solano Avenue
  Berkeley CA 94707

- Elite Software Development Incorporated
  P.O. Box Drawer 1194
  Bryan, Texas 77806

- CA Systems International, Inc.
  One Union Square
  143 Union Blvd, Suite 410
  Lakewood, Colorado
  80228

- Management Computer Controls, Inc.
  2881 Directors Cove
  Memphis, TN 38131

- Carrier, Heating and Cooling (Micro Computers)
  P.O. Box 4808
  Syracuse, New York
  13221

- AndersonTechno-Products Inc.
  Hot-2000 Energy Analysis software
  P.O. Box 7081, Postal Station "J"
  Ottawa, Ontario K2A 3Z6

- G.K. Yuill & Associates (Consulting Engineers)
  1441 Pembina Hwy, Winnipeg
  Manitoba R3T 2C4

- Canadaplan Resources Inc.
  Canadaplan Building
  393 Rynal Road West
  Hamilton, Ontario
  L9B 1V2

- Energy Pathways Inc.
  251 Laurier Avenue West
  Suite 304, Ottawa
  Ontario K1P 5J6